



EXHIBIT 1
STATE OF NEW YORK
DEPARTMENT OF LABOR
DIVISION OF SAFETY AND HEALTH
TWO WORLD TRADE CENTER
NEW YORK, N Y 10047

~~SECRET~~
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MAR 20 1981

March 16, 1981 SHEA DEPT.

Address Reply to:
Radiological Health Unit

Union Carbide Corporation
Metals Division
Electro Metallurgical
"Electomet Company
137-47 Street
Niagara Falls, New York 14302

Attention: Vice President


Dear Sir:

I am enclosing a Summary Report of radiological survey conducted by the U.S. Department of Energy at your facility. This summary is part of a document entitled "A Background Report for the Formerly Utilized Manhattan Engineer District/Atomic Energy Commission Sites Program" (DOE-EV-0097).

Please be aware that all use and transfer of radioactive materials within New York State at industrial installations must be conducted in accord with the Radiological Standards in Industrial Code Rule 38. A copy of which is enclosed for your information.

You can contact the Radiation Safety Officer at your facility for further information on this matter. Also, if you require additional information on the Department of Energy Survey or further action to be taken at your sites by DOE, you can contact Dr. William E. Mott, Director at the address given below.

Very truly yours,


F.J. Bradley, Ph.D.
Principal Radiophysicist

FJB:bd

Enclosure

cc: William E. Mott, Director
Environmental and Safety
Engineering Division
Office of Environment
Department of Energy
Washington, DC 20545

cc: J. Spath

UNION CARBIDE CORPORATION, METALS DIVISION
(Electro Metallurgical "Electromet" Company)
Niagara Falls, New York

Site Function

This facility received uranium tetrafluoride (UF_4) from the Linde plant at Tonawanda, reacted it in induction furnaces to convert it to uranium metal, and then recast it into 110- to 135-kilogram ingots. Contract W-7405-Eng-14 was initiated with Electromet on November 14, 1942, and W-7405-Eng-227 and W-7403-Eng-255 were initiated on March 1, 1943. Contract W-7405-Eng-14 closed out with Amendment 28 on November 27, 1953. Process residues (dolomite slag, uranium chips, and crucible dross) were shipped to other sites for uranium recovery. The specific sites are not known. Other waste from the operation was sent to the Atomic Energy Commission portion of the Lake Ontario Ordnance Works (now known as the Department of Energy Niagara Falls Storage Site).

The uranium tetrafluoride building was also used for zirconium processing and later, just prior to demolition, for titanium processing. In addition, following the termination of the Atomic Energy Commission contracts, uranium and thorium ores were processed for commercial use under New York State Radioactive Material license 950-0139. From August 1965 through April 1972, Union Carbide produced 505 tons of slag bearing 9212 pounds of thorium dioxide and 1293 pounds of uranium oxide. This slag material was placed in 55-gallon drums and buried in a designated area on plant property in a hole 20 feet deep with 4 to 5 feet of soil cover.

Site Description

The Electromet site is located south of Pine Avenue and east of its intersection with Packard Road. The Manhattan Engineer District and Atomic Energy Commission operations took place in only one building, a cinder block and wood structure that was demolished in 1957. It was located in an area now occupied by the south end of a building designated as Building 166.

Owner History

This facility was part of what is now known as the Metals Division of the Union Carbide Corporation. During the Manhattan Engineer District and Atomic Energy Commission period, the facility was called the Electro Metallurgical Company, a Division of Union Carbide and Carbon Corporation.

Radiological History and Status

At the end of the Atomic Energy Commission and Electromet contract, the facilities were sold to the contractor. The plant and equipment were decontaminated through washing, vacuuming, and, in some locations,

removing concrete floors and wood platforms. Final radiological certification of the condition of the plant and a recommendation to release the facility were made on September 28, 1953. The building was later demolished. Demolition debris and uranium processing wastes were transferred to the Atomic Energy Commission portion of the Lake Ontario Ordnance Works, now known as the Department of Energy Niagara Falls Storage Site. In the late 1950s, the wastes from uranium processing were subsequently sent to Oak Ridge National Laboratory for permanent disposal. However, some of the rubble may have been deposited in the old Union Carbide dump (200 to 300 acres located north of Pine Avenue and owned by Newco, now CECOS International, Inc.). Additional investigations are being performed to verify the disposition of this waste.

On August 24, 1976, personnel from Oak Ridge National Laboratory and Oak Ridge Operations Office conducted a screening survey of the site and the old dump. Due to the near background radiation levels encountered, a comprehensive formal survey was not recommended. Further measurements and soil samples will be taken between Buildings 163 and 166 to ensure that no significant residual radioactive material remains in this area. An aerial radiological survey of the Niagara Falls area was conducted by EG&G, Inc., in November 1978. This survey did not identify any radiation levels above guidelines* in the area of the Electromet facility. Any subsequent activity at this site will be based on an evaluation of the findings collected to date and the results of the planned measurements.

* Title 10, Code of Federal Regulations, Part 20, Standards for Protection Against Radiation.